



DECLARATION

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: James Thomas Shiveley

Serial No.: 09/851,720

Group Art Unit: 3749

Filed: 05/09/2001

Examiner: Gravini, S.

For: **RAPID EFFICIENT INFRARED CURING OF POWDER COATINGS/WET COATINGS AND FOR ULTRAVIOLET CURING OF COATINGS AS APPLIED TO LABORATORY AND PRODUCTION PROCESSING**

DECLARATION

I, Deron A. Cook, declare as follows:

1. My name is Deron Cook; I am an attorney at Browse McDowell LPA of Akron, Ohio.
2. I am the attorney currently responsible for the prosecution of U.S. Patent Application S/N 09/851,720
3. This patent application was initially filed by Thomas P. Lewandowski, an attorney who is no longer with the firm of Browse McDowell.
4. On or about December 9, 2002 Mr. Lewandowski filed an Information Disclosure Statement.
5. Attached to the Information Disclosure Statement were a number of brochures and written materials.
6. Two of these brochures were described as showing the invention of the subject application.
7. I requested that the inventor, Thomas Shiveley, review the materials submitted with the Information Disclosure Statement to clarify whether the documents described the device of the subject application.
8. Mr. Shiveley has informed me that the documents do not show the device of the subject application because the brochures do not describe or show any device containing an ultraviolet energy source.
9. Mr. Shiveley has indicated to me that the devices shown in the documents provided with the Information Disclosure Statement are conventional infrared heating devices, which do not contain a ultraviolet energy source.
10. It is unclear why Mr. Lewandowski represented that the devices in the documents submitted with the Information Disclosure Statement indicate that the brochures refer to the devices of the subject application.
11. To my knowledge, this was an oversight and an incorrect description of the documents supplied with the Information Disclosure Statement.
12. The undersigned has secured the Declaration of Thomas Shiveley in support of the affirmations made herein.

I hereby declare that all statement made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United

States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

BROUSE McDOWELL

5/19/2006
Date

Deron Cook
Deron A. Cook
Reg. No. 52,767

Telephone No.: (330) 535-5711
Fax No.: (330) 253-8601

Customer #26781

#643118 v1



PATENT

Attorney's Docket No. 30188.30008

=====

COMBINED DECLARATION AND POWER OF ATTORNEY

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL,
CONTINUATION OR CIP)

=====

As a below named inventor, I hereby declare that this declaration is of the following type: (check one applicable item below)

- ☒ original
- ☐ design
- ☐ supplemental

[NOTE: If the declaration is for an International Application being filed as a divisional, continuation or continuation-in-part application do not check next item; check appropriate one of last three items.]

- ☐ national stage of PCT

[NOTE: If one of the following 3 items apply then complete and also attach ADDED PAGES FOR DIVISIONAL, CONTINUATION OR CIP.]

- ☐ divisional
- ☐ continuation
- ☐ continuation-in-part (CIP)

INVENTORSHIP IDENTIFICATION

[**WARNING:** If the inventors are each not the inventors of all the claims an explanation of the facts, including the ownership of all the claims at the time the last claimed invention was made, should be submitted.]

My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor or an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**RAPID EFFICIENT INFRARED CURING OF POWDER COATING/WET COATINGS AND/OR
ULTRAVIOLET CURING OF COATINGS AS APPLIED TO LABORATORY AND PRODUCTION
PROCESSING**

SPECIFICATION IDENTIFICATION

The specification of which: (complete (a), (b) or (c))

- (a) ☐ is attached hereto.
- (b) ☒ was filed on May 9, 2001, Serial No. 09/ 851,720, by Express Mail No. EL722380494US; or
- ☐ was filed on _____, Serial No. not yet know, by Express Mail No. _____; or as
- (c) ☐ was described and claimed in PCT International Application No. _____ filed on _____ and as amended under PCT Article 19 on _____ (if any).

[NOTE: Amendments filed after the original papers are deposited with the PTO which contain new matter are not accorded a filing date by being referred to in the declaration. Accordingly, the amendments involved are those filed with the application papers or, in the case of a supplemental declaration, are those amendments claiming matter not encompassed in the original statement of invention or claims. See 37 CFR 1.67.]

ACKNOWLEDGEMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the Office all information known to the person to be material to patentability as defined in § 1.56.

☐ In compliance with this duty there is attached an information disclosure statement, 37 CFR 1.97.

CLAIM PRIORITY TO FOREIGN APPLICATION

I hereby claim foreign priority benefits under Title 35, United States Code, 119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

(complete (d) or (e))

(d) ☒ no such applications have been filed.

(e) ☐ such applications have been filed as follows.

[NOTE: Where item (c) is entered above and the International Application which designated the U.S. claimed priority check item (e), enter the details below and make the priority claim.]

**EARLIEST FOREIGN APPLICATION(S), IF ANY FILED WITHIN 12 MONTHS
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION**

COUNTRY	APPLICATION No.	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 USC 119
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO
			<input type="checkbox"/> YES <input type="checkbox"/> NO

**ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS
(6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION**



CLAIM PRIORITY OF PROVISIONAL APPLICATION

I hereby claim domestic priority benefits under Title 37, Code of Federal Regulations § 1.78 (a)(3)-(4) of any provisional application(s) filed in accordance with Title 35, United States Code § 111(b) and Title 37, Code of Federal Regulations § 1.51(a)(2) and § 1.53(b)(2).

(complete (f) or (g))

(f) ☐ no such provisional applications have been filed.

(g) ☒ such provisional applications have been filed as follows:

[NOTE: Where item (g) is entered above, enter the details below and make the priority claim.]

DOMESTIC (PROVISIONAL) APPLICATION(S), IF ANY, FILED WITHIN 12 MONTHS PRIOR TO THIS NON-PROVISIONAL U.S. APPLICATION

PROVISIONAL APPLICATION SERIAL NO.	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 CFR § 1.78(a)(4)
60/202,788	9, May, 2000	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
		<input type="checkbox"/> YES <input type="checkbox"/> NO
		<input type="checkbox"/> YES <input type="checkbox"/> NO
		<input type="checkbox"/> YES <input type="checkbox"/> NO

CLAIM PRIORITY OF NON-PROVISIONAL APPLICATION

I hereby claim domestic priority benefits under Title 37, Code of Federal Regulations § 1.78 (a)(1)-(2) of any non-provisional application(s) filed in accordance with Title 35, United States Code § 111(b) and Title 37, Code of Federal Regulations § 1.51(a)(2) and § 1.53(b)(2).

(complete (f) or (g))

(f) ☒ no such non-provisional applications have been filed.

(g) ☐ such non-provisional applications have been filed as follows:

[NOTE: Where item (g) is entered above, enter the details below and make the priority claim.]

DOMESTIC (NON-PROVISIONAL) APPLICATION(S), IF ANY, FILED WITHIN 12 MONTHS PRIOR TO THIS NON-PROVISIONAL U.S. APPLICATION

NON-PROVISIONAL APPLICATION SERIAL NO.	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 CFR § 1.78(a)(1)-(2)
		<input type="checkbox"/> YES <input type="checkbox"/> NO
		<input type="checkbox"/> YES <input type="checkbox"/> NO
		<input type="checkbox"/> YES <input type="checkbox"/> NO
		<input type="checkbox"/> YES <input type="checkbox"/> NO
		<input type="checkbox"/> YES <input type="checkbox"/> NO

POWER OF ATTORNEY

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Deron A. Cook

52,767

(check the following item, if applicable)

☐ Attached as part of this declaration and power of attorney is the authorization of the above-named attorney(s) to accept and follow instructions from my representative(s).

SEND CORRESPONDENCE TO

Deron A. Cook
Brouse McDowell

Customer #26781

DIRECT TELEPHONE CALLS TO:

Deron A. Cook

Phone: (330) 535-5711

Facsimile: (330) 253-8601

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURE(S)

Full name of sole or first inventor:

James Thomas Shiveley

Date: May 18, 2006

Inventor's signature: James Thomas Shiveley

Country of Citizenship: USA

Residence: Brecksville, Ohio 44141

Post Office Address: 10965 Tanager Trail

CHECK PROPER BOX(ES) FOR ANY OF THE FOLLOWING ADDED PAGE(S) WHICH FORM A PART OF THIS DECLARATION

☐ Signature for third and subsequent joint inventors. Number of pages added: _____

☐ Signature by administrator (trix), executor (trix) or legal representative for deceased or incapacitated inventor. Number of pages added: _____

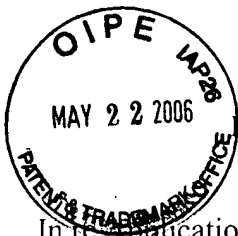
☐ Signature for inventor who refuses to sign or cannot be reached by person authorized under 37 CFR 1.47. Number of pages added: _____

☐ Added pages to combined declaration and power of attorney for divisional, continuation, or continuation-in-part (CIP) application. Number of pages added: _____

☐ Authorization of attorney(s) to accept and follow instructions from representative

If no further pages form a part of this Declaration then end this Declaration with this page and check the following item.

☒ This declaration ends with this page



DECLARATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: James Thomas Shiveley

Serial No.: 09/851,720

Group Art Unit: 3749

Filed: 05/09/2001

Examiner: Gravini, S.

For: **RAPID EFFICIENT INFRARED CURING OF POWDER COATINGS/WET COATINGS AND FOR ULTRAVIOLET CURING OF COATINGS AS APPLIED TO LABORATORY AND PRODUCTION PROCESSING**

DECLARATION

I, James Thomas Shiveley, declare as follows:

1. My name is James Thomas Shiveley; I am the inventor of the device described in U.S. Patent Application S/N 09/851,720.
2. I have reviewed the documents that were provided to Thomas P. Lewandowski and which were filed with the invention disclosure statement.
3. None of the devices depicted in the documents, copies of which are attached hereto, show the ultraviolet feature of the device that is the subject of the application.
4. The devices depicted in the documents show conventional infrared heating units which were previously developed and sold by my company Innovative Industries. These devices do not have an ultraviolet capability.

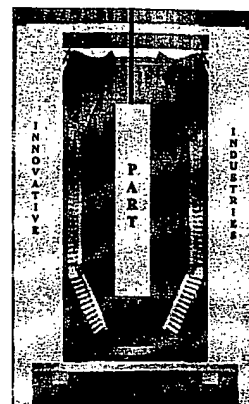
I declare that all statements made herein are true and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. §1001 and that such false statements may jeopardize the validity of this document and of the patent application to which it relates.

Signed James Thomas Shiveley this 18 day of May, 2006.
James Thomas Shiveley

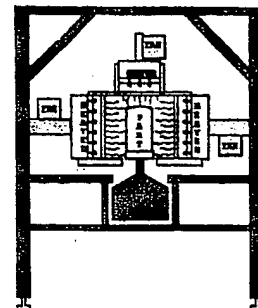


**Manufacturer of Standard
and Specialized Electric
Infrared Heaters and
Heating Systems**

- Electric Infrared Industrial Products
- Electric Infrared Large Industrial Systems
- Electric Infrared Paint & Powder Curing Ovens
- Electric Infrared Special Systems
- Company History
- Ordering Information



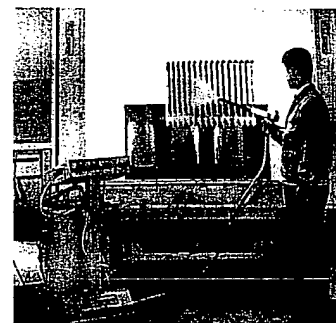
MONO-RAIL OVEN



CHAIN-ON-EDGE OVEN



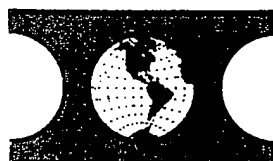
SAMPLE PROCESSOR



SPRAYING SYSTEMS

**WE offer the POWDER/WET COAT Finishing Industry
Turnkey Finishing Systems including the following
Specialized Equipment:**

1. **Electric Infrared Pre-Heat and Curing Ovens:**
 - Monorail, Chain-on-Edge, Belt Driven, and Batch.
 - Short, Medium, and Long Wavelength Energy Sources
2. **Complete Electrostatic Powder Spraying Systems (*Economically Priced*) including:**
 - Spray Guns and Multi-Gun Reciprocators.
 - Spray Booth Systems with Powder Retrieving Systems.
3. **NEW!! Continuous In-line Paint Burn-off Systems (Patent Pending):**
 - Processes At Normal Production Rates.
 - No Removal of Hooks Required.
4. **NEW!! Pilot Infrared Curing Systems for Coated Parts to Simulate Process Parameters, Record Data and Establish (Patent Pending):**
 - The Optimum Wavelengths, Process Temperatures and Times.
 - The Minimal Real Estate necessary for Processing High Quality Products.
5. **NEW!! Automated Powder/Wet Coat Blank (Sample) Testing Unit (Patent Pending):**
 - Programmed: Wavelengths, Temperatures and Process Times.
 - Establish Optimum Process Parameters.
 - Verify Formulations and Colors.



Innovative Industries

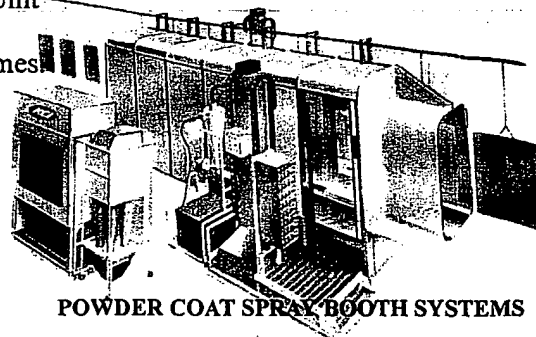
PO BOX 41205 Cleveland, OH 44141

Ph: 330-468-2601 Fax: 330-468-2602

1-800-THERM-IR

Web: www.innovativeindustries.com

E-mail: info@innovativeindustries.com



POWDER COAT SPRAY BOOTH SYSTEMS

Your Source of Quality Curing Ovens and Hi-Tech Applications Consultation

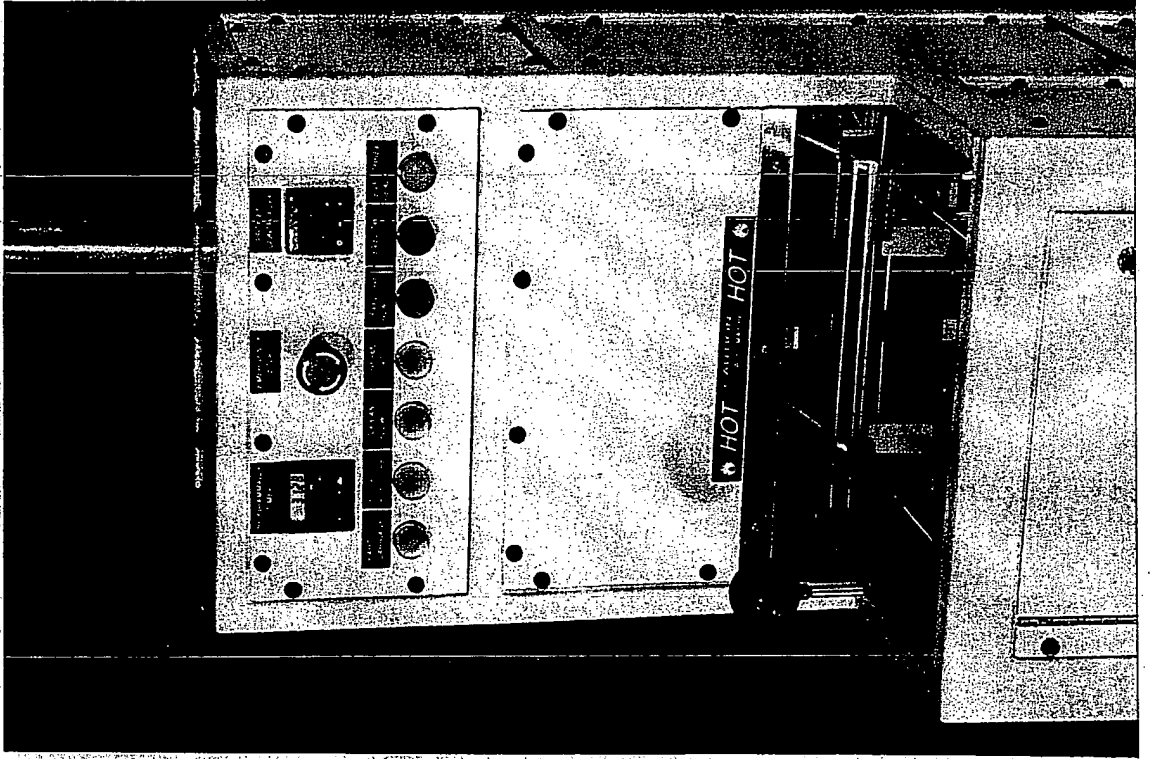
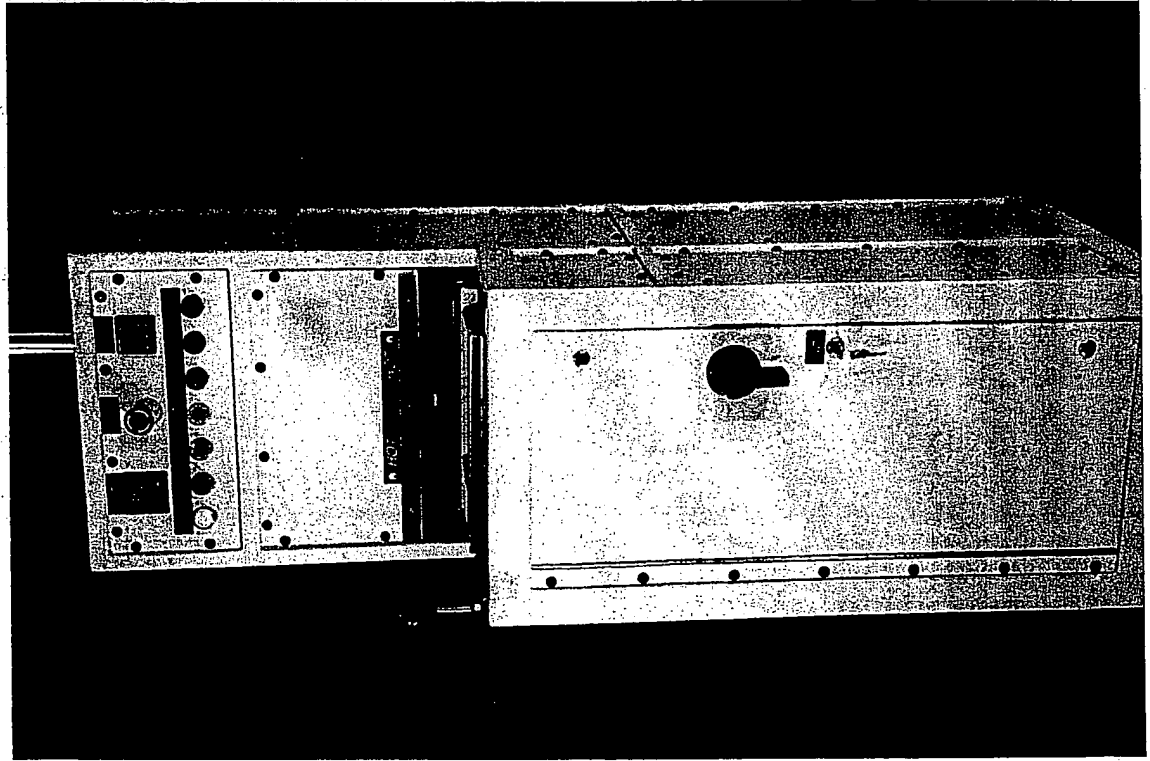
INNOVATIVE INDUSTRIES

Box 41205 Cleveland, Ohio 44141

E-mail: info@innovativeindustries.com

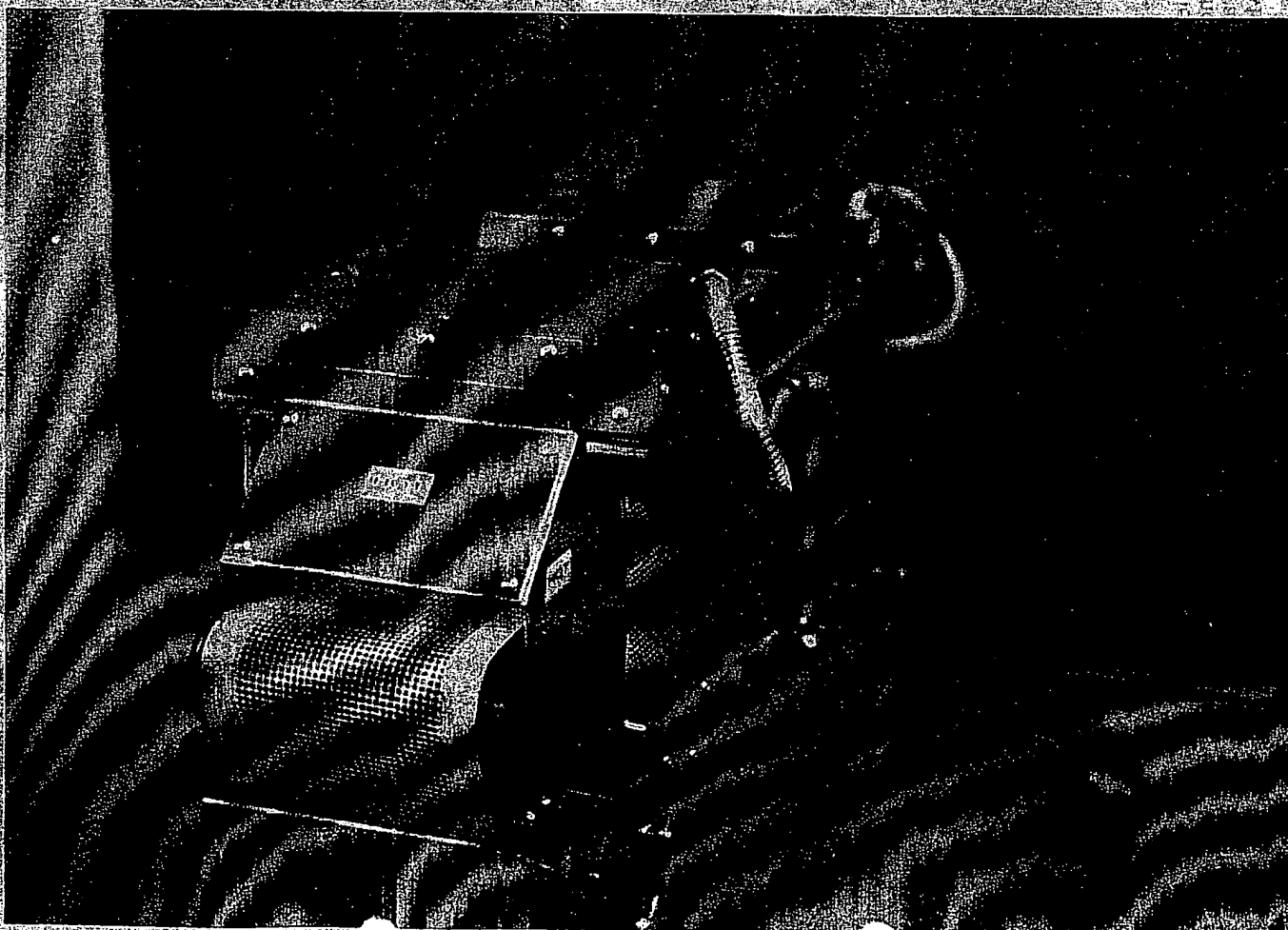
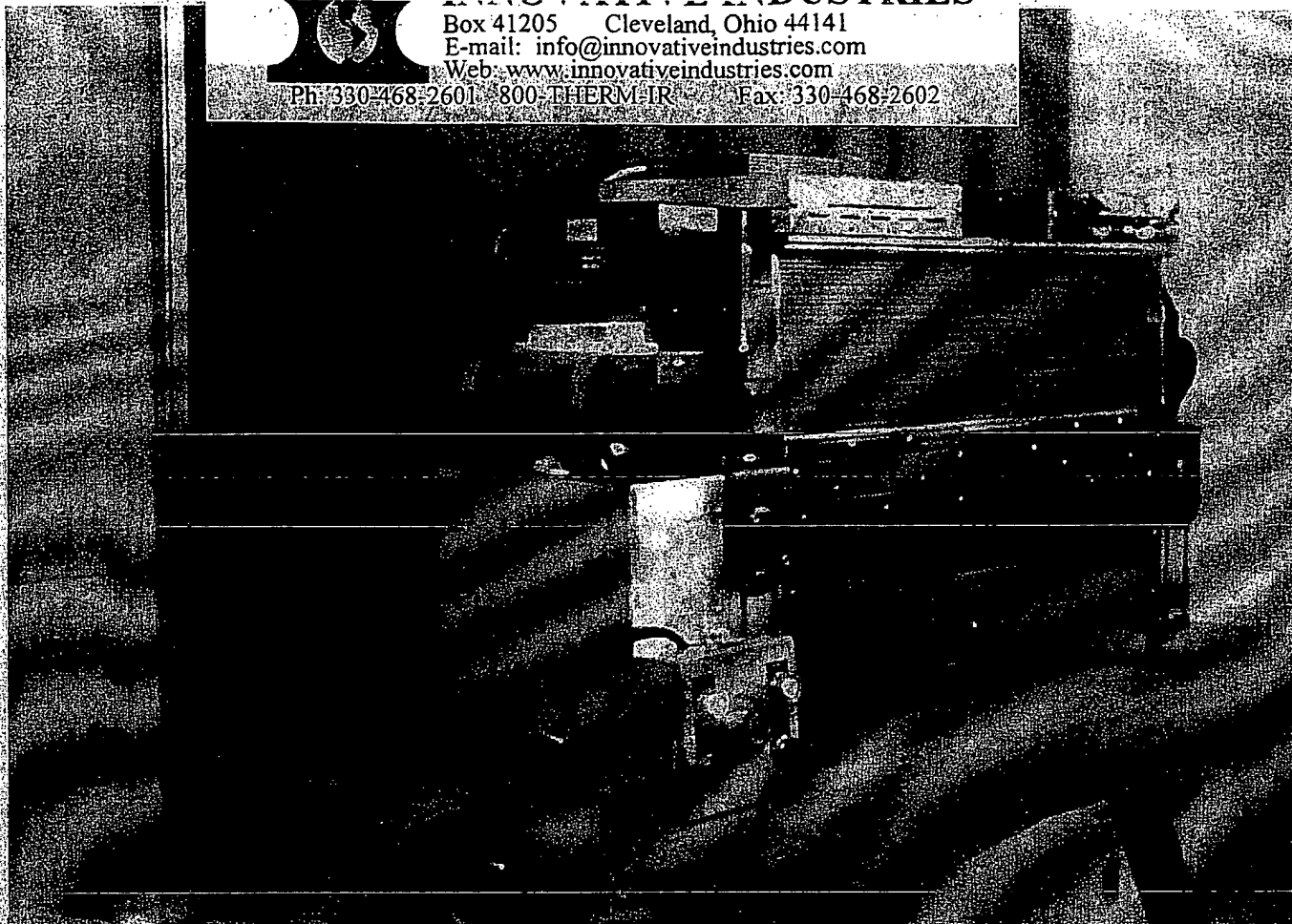
Web: www.innovativeindustries.com

Ph: 330-468-2601 800-THERM-IR Fax: 330-468-2602





Box 41205 Cleveland, Ohio 44141
E-mail: info@innovativeindustries.com
Web: www.innovativeindustries.com
Ph: 330-468-2601 800-THERM-IR Fax: 330-468-2602





II INNOVATIVE INDUSTRIES

Box 41205 Cleveland, Ohio 44114

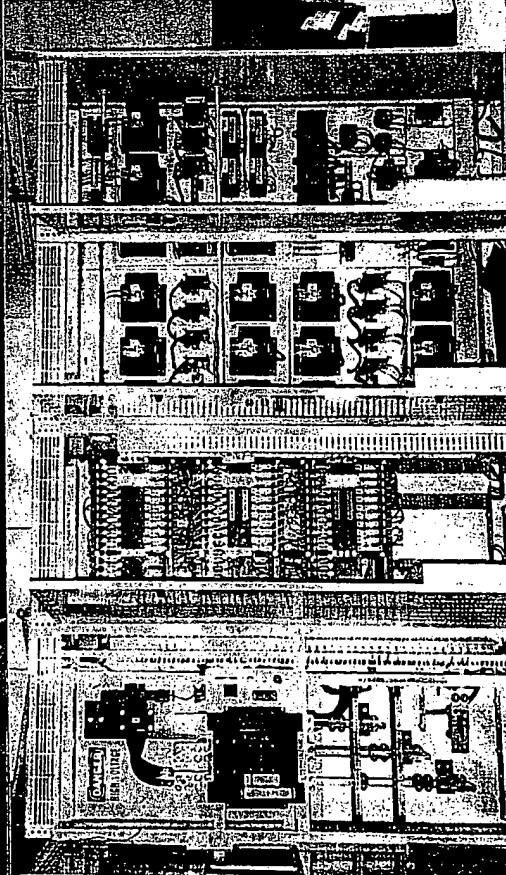
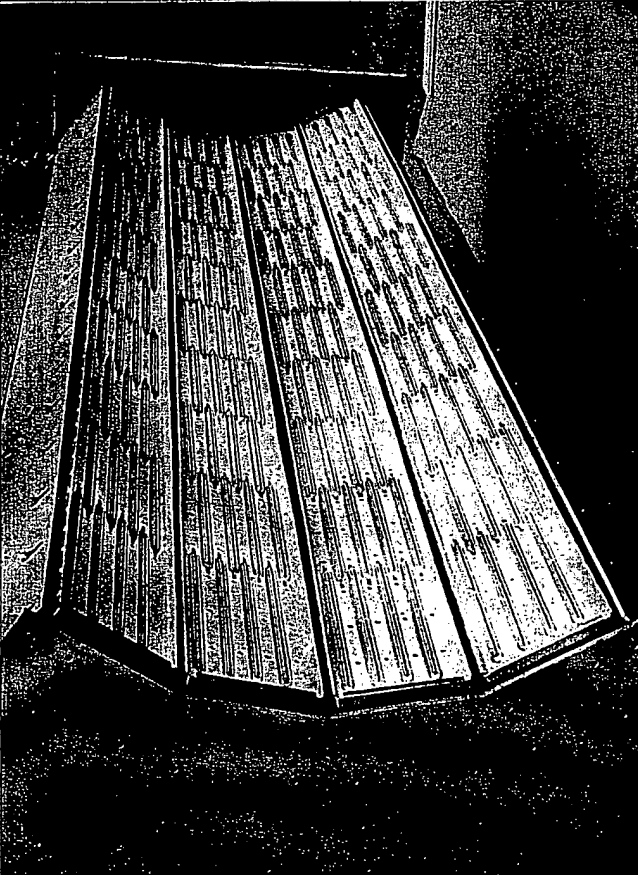
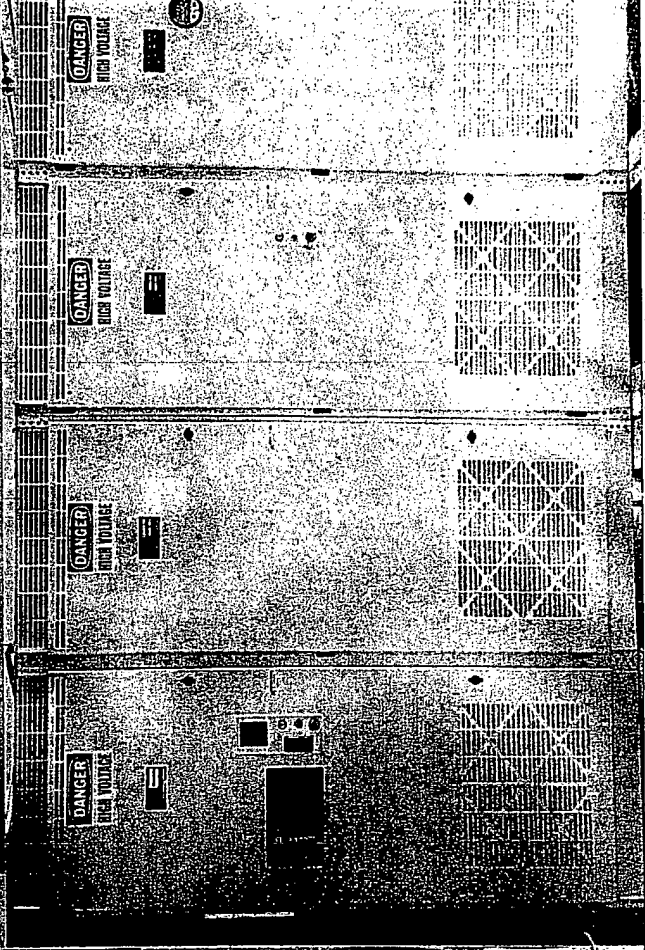
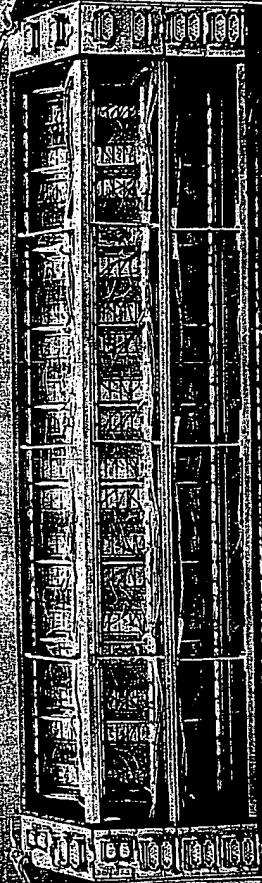
E-mail: info@innovativeindustries.com

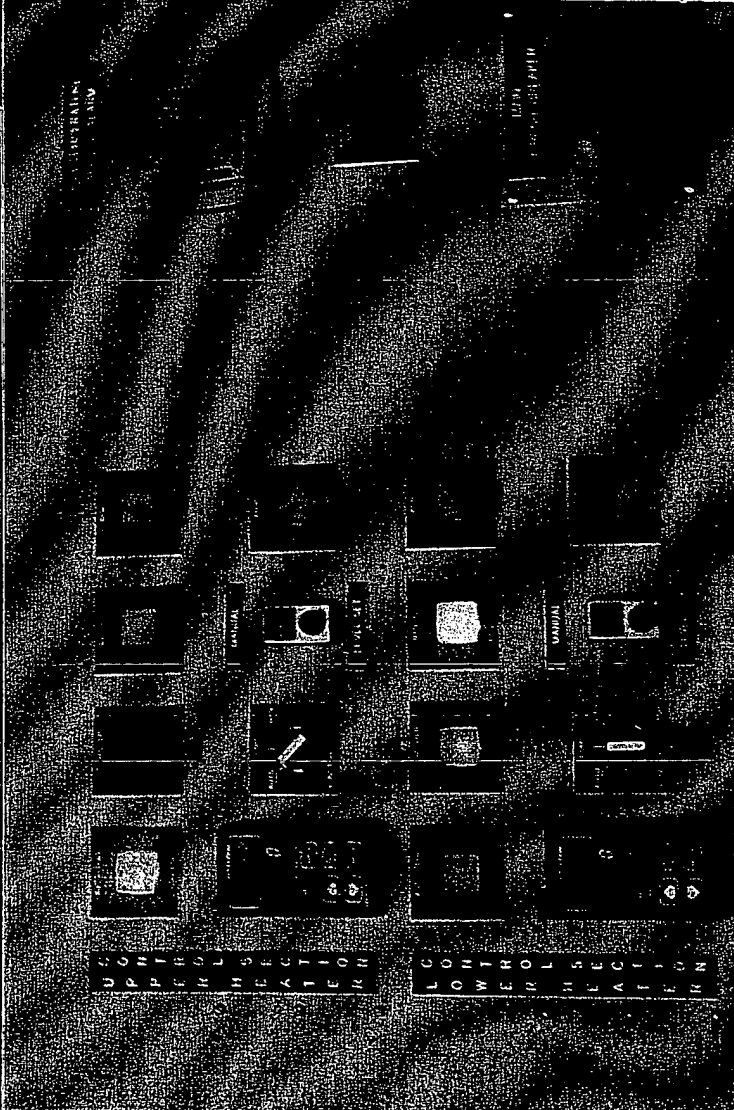
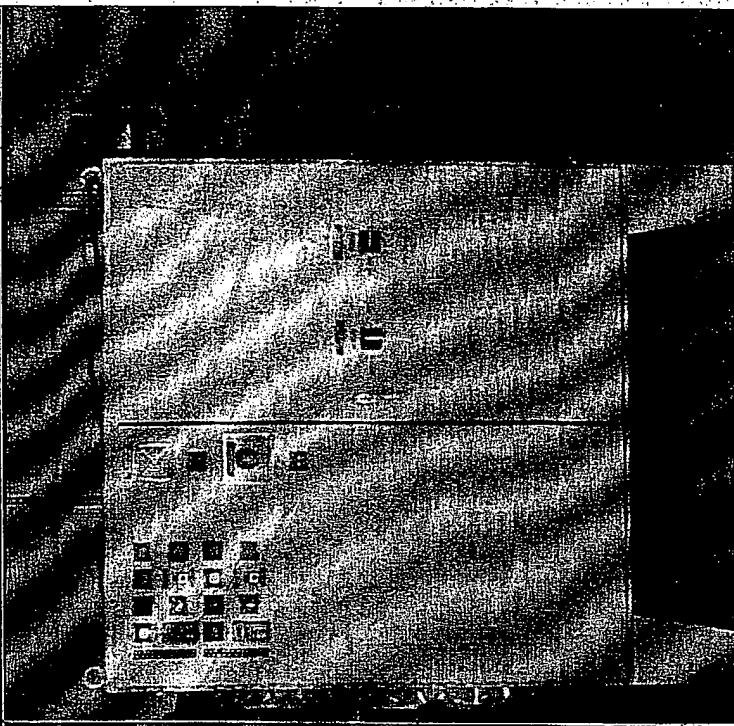
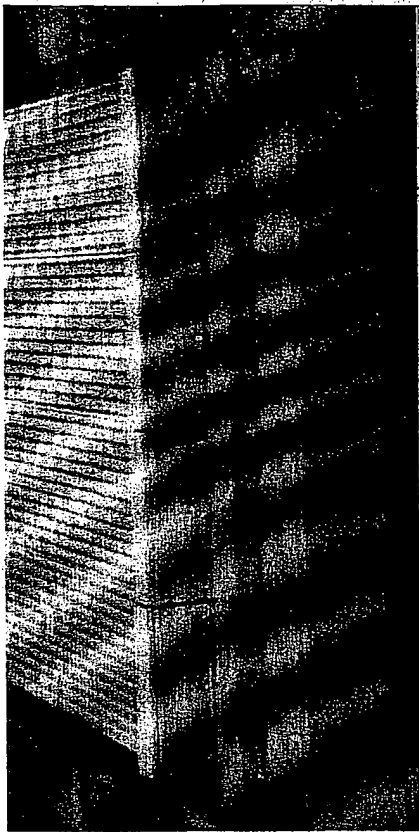
Web: www.innovativeindustries.com

Ph: 330-468-2601 800-THERM-IR Fax: 330-468-2602

INNOVATIVE INDUSTRIES

Box 41205 Cleveland, Ohio 44141
E-mail: info@innovativeindustries.com
Web: www.innovativeindustries.com
Ph: 330-468-2601 800-THERM-IR Fax: 330-468-2602







INNOVATIVE INDUSTRIES

Box 41205 Cleveland, Ohio 44141

E-mail: info@innovativeindustries.com

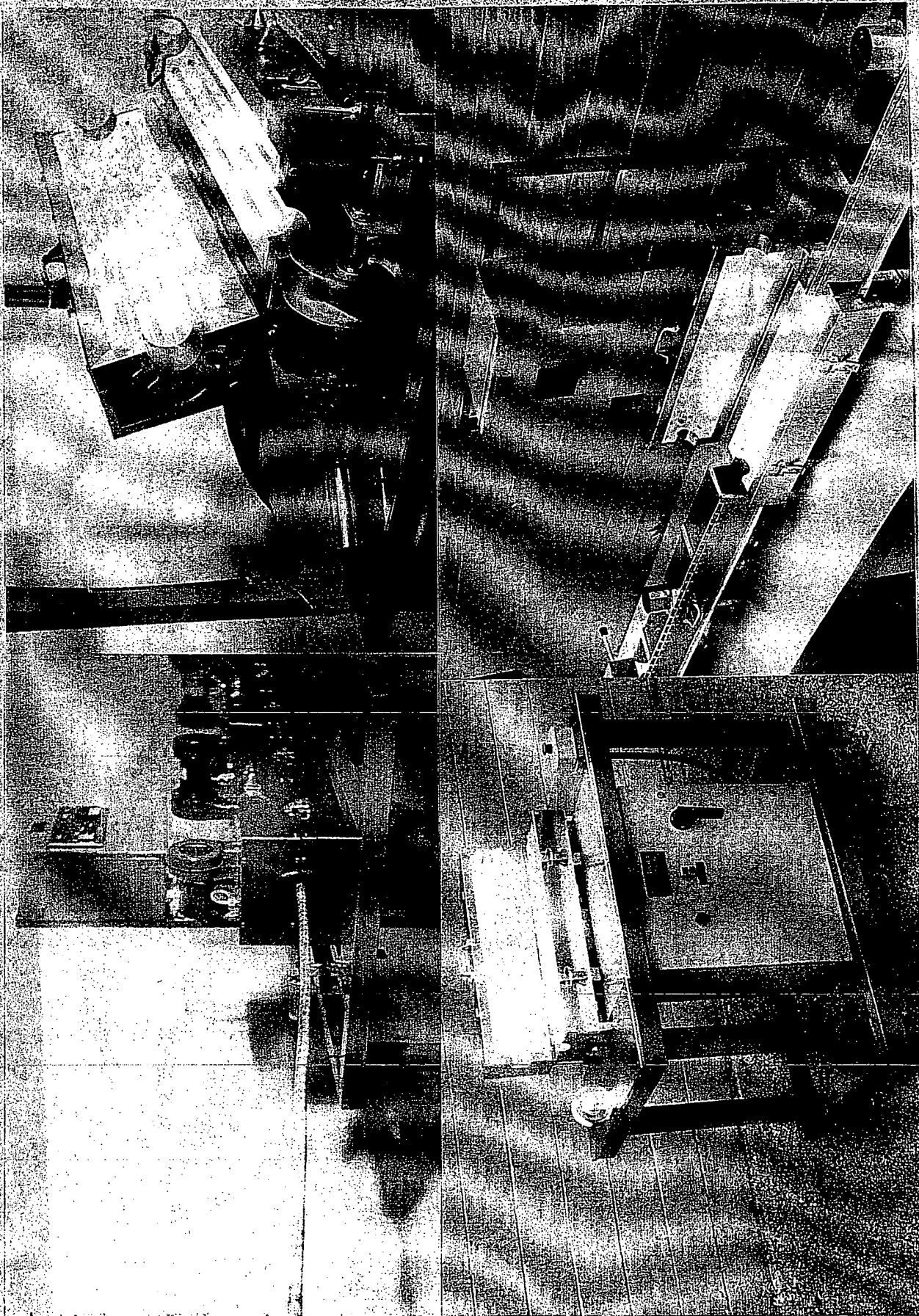
Web: www.innovativeindustries.com

PH: 330-468-2601 800-THERM-IR Fax: 330-468-2602

INNOVATIVE INDUSTRIES

Box 41205 Cleveland, Ohio 44141
E-mail: info@innovativeindustries.com
Web: www.innovativeindustries.com

Ph: 330-468-2601 800-THERME-IR Fax: 330-468-2602



INNOVATIVE INDUSTRIES CLEVELAND, OHIO USA

INDUSTRIAL THERMAL PROCESSING

1. Electric Infrared Energy is utilized for heating a host of parts and materials in Industry and Commercial applications. Surprising, to most individuals, approximately 80% of the materials and products about us could be thermally processed with Infrared Energy.
 - A. These Heating Systems may be somewhat simplified or they may be extremely complex Heating Technology wise and Power Control wise.
2. Innovative Industries has a reputation for delivering High Watt Densities over a Large Target Area under Continuous Operating Conditions.
 - A. A Single Heating System may range in energy dissipation levels of one Megawatt of power.
 - B. See Photos of Large Array Systems.
3. Innovative Industries has developed and manufactures Specialized Heating Systems for various Industries, offering High Production Rates under Auto-Control.
 - A. These Heating Systems may be Stand Alone or Conveyorized.
 - B. Major Industries which utilize these Large Oven Systems are:
 - (a) Paint and Powder Coat Curing
 - (b) Coil Line Drying
 - (c) Paper Drying
 - (d) Graphic Drying
 - (e) Plastic Thermal Forming

COAT DRYING TECHNOLOGY

1. Electric Infrared Energy is an excellent, Efficient energy source for most Coating Materials and Basic Plastic Materials (sheet and film).
 - A. The Infrared Energy is Radiated Directly on to the Surface where the Energy is Dispersed Depth-Wise through the Coating.
 - (a) The Degree of Depth Dispersion relates to the Material Composition, the Percent of Pigmentation, the Coat Thickness and the Temperature (Wavelength) of the Emitting Source.
 - B. Wavelength Effect on Energy Absorption:
 - (a) The Energy Wavelength is established by the Emitter (source) Temperature.
 - (b) The Higher the Temperature, the Shorter the Wavelength.
 - (c) Standard Quartz Heating Lamps (T-3 type) emit in the Short Wavelength Spectrum when operating at Rated Voltage. These Lamps emit in the Medium Wavelength Spectrum when operating at Half Rated Voltage.
 - (d) Quartz Tube Type Electrical Infrared Heaters deliver Medium Wavelength Radiated Energy.
 - (e) Ribbon and Foil Type Element Electric Infrared Heaters deliver Medium and Long Wavelength Radiated Energy.
 - (f) Black Body Panel Type Electric Infrared Heaters deliver Long Wavelength Radiated Energy.
 - (g) Metal Sheathed Type Electric Infrared Heaters deliver Long Wavelength Radiated Energy.

COAT DRYING TECHNOLOGY (con't)

2. Short Wavelength Energy Sources offer very Deep Penetration into the coating.
 - A. Energy is Released as it Passes Through the Coating into the product. The energy which is introduced into the product decreases the heat sink effect of the product. This Enhances the Wetting Action of the coating onto the product.
 - (a) In Powder Coat Applications, the heating of the part permits a Rapid Gelling of the powder and Improved Wetting onto the part.
 - (b) In Wet Coat Applications, the heating of the part permits the Driving Out of the Moisture from the Inside with Minimal Blistering of the coating.
 - (c) These advantages result in Very High Heating Rates offering a much Shorter Oven Length.
3. Medium Wavelength Energy Sources offer Moderate Depth Penetration through the product.
 - A. Most of the Penetrating Energy is Absorbed in the Coating. This feature is ideal for Holding the coating at Curing Temperature after it has been Pre-Heated such as Curing Coatings on Plastic parts. This Minimizes the possibility of distorting the part.
4. Long Wavelength Energy Sources offer No Depth of Penetration.
 - A. All Radiated Energy is Absorbed Totally on the Surface. Any internal heating of the coating must be conducted in, requiring Extended Time for processing and Longer Oven Lengths.
5. Multi-Wavelength Energy Sources offer a wide Spectrum of various Wavelengths for Optimizing Process Performance.
 - A. These frequencies are Variable and may be Adjusted to improve Efficiency (Proprietary).
 - B. Processing Recommendations:
 - (a) Utilize Short Wavelength Energy for Pre-Heating applications.
 - (b) Utilize Medium Wavelength Energy for Curing or Holding Temperatures.
 - (c) Utilize Long Wavelength Energy for Curing as an Option to Medium Wavelength.

PAINT AND POWDER CURING OVENS

1. Our Company offers a complete line of "Turn Key" Curing Ovens.
 - A. Oven Types include:
 - (a) Monorails
 - (b) Chain-on-edge
 - (c) Belt Driven
 - (d) Batch
 - B. Monorail or Batch Ovens
 - (a) May have Fixed or Moveable Walls to allow for various product widths.
 - (b) We offer "Special Ovens" designed for Large Enclosures or Structural Sections (Proprietary).
 - (c) See Sketches on next page.

P.O. BOX 41205 CLEVELAND, OHIO 44141

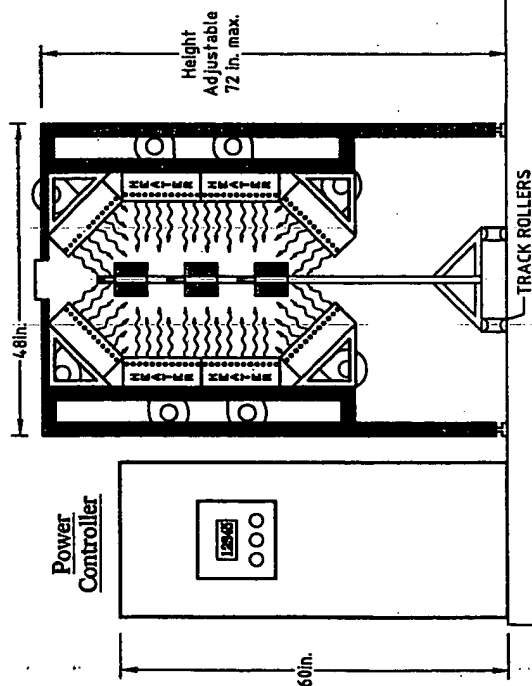
TEL: (330)468-2601 FAX: (330)468-2602

WEB: www.innovativeindustries.com 800-THERM-IR

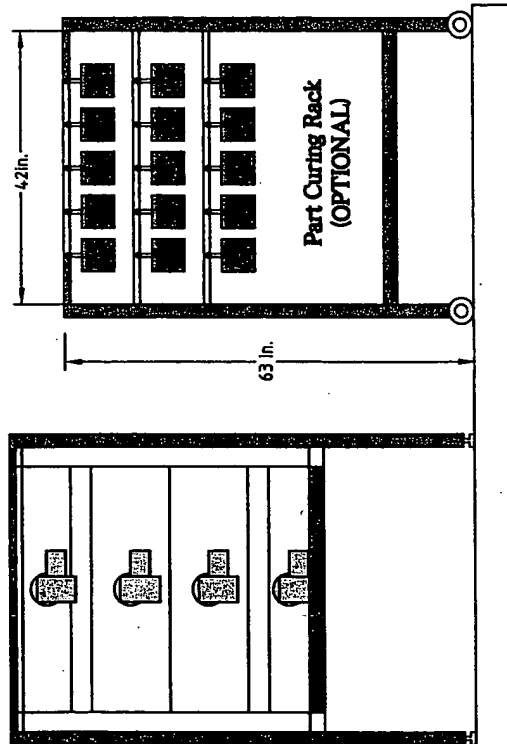
E-MAIL: info@innovativeindustries.com

DUAL SIDED STATIONARY ELECTRIC INFRARED POWDERCOAT BATCH PRE-HEAT/CURING OVEN

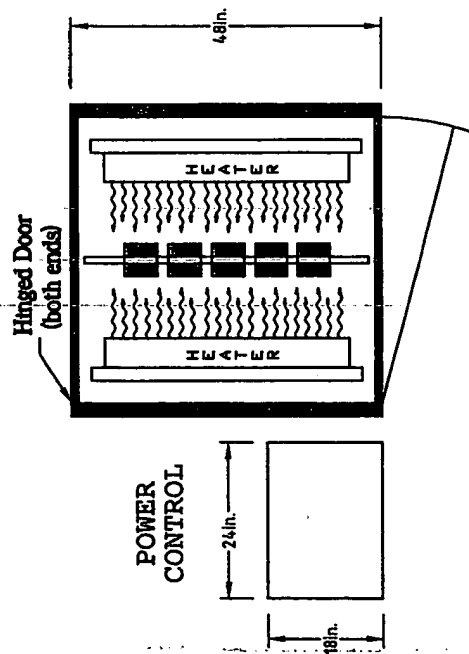
END VIEW



SIDE VIEW



TOP VIEW



APPLICATIONS:

1. Pre-heat of Wet and Powder Coat.
2. May be used as Batch or Continuous.
3. Wavelength Sources:
 - A. Short Wavelength Energy offers Rapid Heating Rates for Pre-heating resulting in short, efficient, ovens.
 - a. Offers deep penetration.
 - b. Releases most of the energy through the coating, however, some energy is absorbed on the surface of the part.
 - B. Medium Wavelength Energy offers efficient releasing of Radiant Energy through the coating only.
 - C. Long Wavelength Energy is also absorbed at the surface of the coating but must be conducted through the coating.
- a. This Method requires extended process time.

SPECIFICATIONS:

MODEL : DS180-38-24-36-48-96-350KW-A/N/T

1. Optional Heater Types:
 - A. Quartz Heating Lamp
 - B. Quartz Tube
 - C. Foil or Ribbon Element
 - D. Metal Sheathed
2. Mechanical:
 - A. Oven Size: 38" L x 24" W x 36" H
 - B. Overall Size: 48" L x 48" W x 72" H
 - C. Portable Part Curing Rack (Optional)
3. Electrical:
 - A. Power Rating: 350KW at 480VAC/3Ø
 - B. Power Level Control: Dual Level/ Dual Timer
 - C. Automatic Control: Closed Loop Feedback (Optional)

INNOVATIVE INDUSTRIES
 BOX 41205
 CLEVELAND, OHIO 44141
 TEL: (830)468-2601 FAX: (830)468-2602 800-THERM-IR
 E-MAIL: info@innovativeindustries.com WEB: www.innovativeindustries.com

PROPRIETARY

BATCH INFRARED
 DRYING SYSTEM

TB-203

SEPT. 15, 1998

INNOVATIVE INDUSTRIES CLEVELAND, OHIO USA

COMPANY HISTORY AND CAPABILITIES

1. INNOVATIVE INDUSTRIES was founded in 1977, primarily as a High Density Electric Infrared Heating and Power Control Equipment Supplier of Standard and Specialized Hardware for Industrial and Aerospace Applications.
2. The Company is located in an Industrial Enterprise Zone of Macedonia, Ohio (a southeastern suburb of Cleveland) and consists of a modern 30,000 square foot building of manufacturing and office space.
3. The Company offers one of the highest levels of Electric Infrared Heating Technology in the world.
 - A. In 1990 the Company supplied a 1200 watts / in² Heating System to NASA to Simulate Re-entry Temperatures on to the X-30 National Aerospace Plane. This system was designed to create 3000°F on the vehicle within three seconds.
 - B. An Australian Company recently conducted a search for the Most Advanced Technical Company in the world offering the Highest Quality Infrared Heating Products available. Innovative Industries was selected to be #1 and acquired the contract.
4. The Company offers Design and Application Experience un-surpassed by any other manufacturers in their industry.
5. The Company offers many Standard Infrared Heaters and Heating Systems relating to a broad range of Industrial Thermal Processes.

APPLICATIONS

- | | |
|--|---|
| 1. Paint (powder) Pre-heat/
Curing: | 7. Graphic Drying: |
| 2. Paint (wet) Drying/Curing: | 8. Adhesive Drying: |
| 3. Paint Curing Simulation: | 9. Part Drying: |
| 4. Coil Line Drying/Curing: | 10. Plastic Thermoforming:
(Sheet or Structures) |
| 5. Web Drying:
(Textiles, Paper, etc.) | 11. Plastic Pre-form:
(Bottle blowing) |
| 6. Sheet Drying:
(Paper, Plywood, etc.) | 12. Tubular Processing:
(Hose, Pipe, etc.) |

ELECTRIC INFRARED SYSTEMS OFFERED

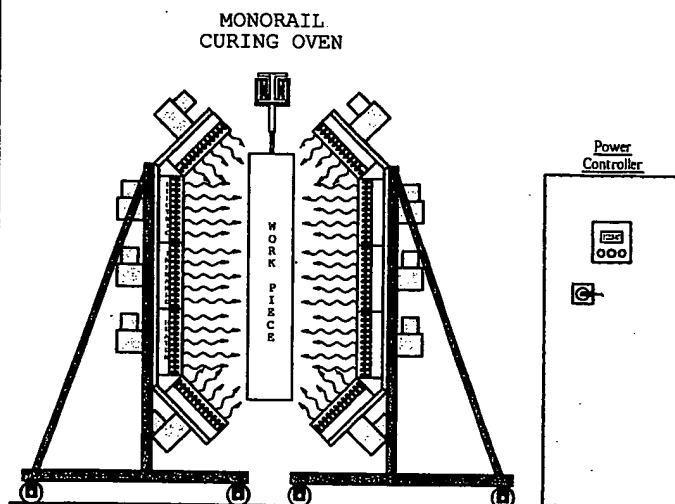
1. Electric Infrared Heating/ Power Control Systems:
 - A. Batch Ovens (fixed or pass-through)
 - B. Monorail-Type Ovens (conveyor optional)
 - C. Chain-on-edge Type Ovens (conveyor optional)
 - D. Belt Driven Type Ovens (conveyor optional)
 - E. Automated Production Heating
 - F. Paint Curing Simulation
 - G. Surgical Patient Heating

P.O. BOX 41205 CLEVELAND, OHIO 44141
 TEL: (330)468-2601 FAX: (330)468-2602
 WEB: www.innovativeindustries.com 800-THERM-IR
 E-MAIL: info@innovativeindustries.com

ELECTRIC INFRARED SYSTEMS OFFERED

1. Paint and Powder Curing Ovens.

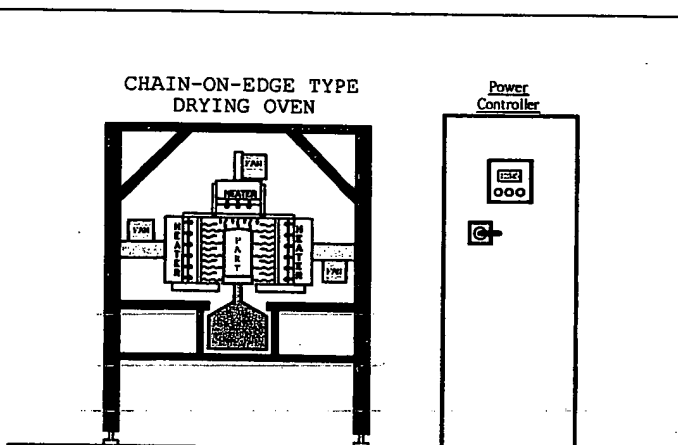
- A. Our Company offers the following types of complete "Turn Key" Curing Ovens:
- | | |
|------------------------|--------------------------|
| (a) <u>Monorail</u> | (b) <u>Chain-on-Edge</u> |
| (c) <u>Belt Driven</u> | (d) <u>Batch</u> |



SKETCH #1

For Monorail and Batch Applications

1. May have Fixed or Moveable Walls to allow for various product widths.
2. We offer "Special Ovens" designed for Large Enclosures or Structural Sections (Proprietary).



SKETCH #2

For Chain-on-Edge Applications

1. Designed to allow part rotation for improved coating distribution.

NOTE: For Technical Information on Energy Wavelength, request, Technical Bulletin, TB-201, which explains:

- A. The Theory.
- B. The types of Heater Sources and their Wavelengths.
- C. The required Wavelength for a Specific Process.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☒ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☒ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.